



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/777,824	02/12/2004	Lynn W. Schultz	7883	5701

22922 7590 08/25/2006

REINHART BOERNER VAN DEUREN S.C.
ATTN: LINDA KASULKE, DOCKET COORDINATOR
1000 NORTH WATER STREET
SUITE 2100
MILWAUKEE, WI 53202

EXAMINER

BEACH, THOMAS A

ART UNIT PAPER NUMBER

3671

DATE MAILED: 08/25/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/777,824	Applicant(s) SCHULTZ ET AL.	
	Examiner Thomas A. Beach	Art Unit 3671	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on amendment filed 05/18/06.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24, 26, 27 and 29-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 13-17 is/are allowed.
- 6) ☒ Claim(s) 1-12, 18-24, 26, 27 and 29-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. Claim 1, 2, 3, 5-7, 11, 12, 18-20, and 25-27, 29 and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirama et al 20020149673 in view of Engel et al 5,452,982. Hirama shows facilitating the alignment of a hitching mechanism located on a vehicle with a mating hitching mechanism located on an object to be removably connected to the vehicle, the system comprising: a target area 5 located on the object be removably connected the vehicle, the target area facing the vehicle when the object to be removably connected to the vehicle is in position for connection to the vehicle; a sealed video camera 2 (inherently includes a wiring harness; claims 6-7) for installation fixed position on the vehicle, the video camera being oriented toward the target area on the object removably connected to the vehicle when the object to be removably connected the vehicle is in position for connection to the vehicle where the lens of the video camera (figure 2) is *generally* straight (relative to figure 1) in a level manner and *substantially* the same height as the where indicia would be as combined; an a video monitor for placement in the passenger compartment of the vehicle in a position in which it may be viewed by a driver the vehicle, the video monitor for displaying thereon an image viewed by the video camera. Hirama shows a monitor in the dash (claim 11) in which CRT's or LCD's are commonly used (claim 12) using a trailer with the camera adjacent the trailer hitch with the target area (18-20). Hirama shows that the camera capable be on the vehicle (claim 25).

Hirama does not show indicia however, Engle shows a similar hitching system that uses an alignment indicia located on the surface in a position in which the alignment indicia will be the center the image when the object be removably connected to the vehicle is in position for connection to the vehicle (col. 2, lines 5-28). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hirama, as taught by Engle, to include, lines and colors being obvious since Examiner take official notice of indicia that uses markings and color to enhance visibility, indicia to improve accuracy of alignment using cameras during hitching.

2. Claim 8-10, 21-24 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hirama et al 20020149673 and Engel et al 5,452,982 in view of Mill 6,222,457. Hirama does not disclose wireless transmitters and a battery; however, Mills shows a similar hitching system that uses wireless receivers, transmitters using sensors and RF waves/infrared reflecting waves and a battery. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify Hirama, as taught by Engle, to include wireless components such as transmitter and receiver, along with a battery for ease installation without wires.

Allowable Subject Matter

3. Claims 13-17 allowed.

Response to Arguments

4. Applicant's arguments filed 05/18/06 have been fully considered but they are not persuasive. The claim language of generally and substantially are considered relative terms in which the primary reference Hirama et al shows more than one location of the camera (figures 1-2) in which figure 2, as combined, shows the claim language.

Applicant's arguments regarding Engel are noted; however, the primary reference already discloses the location of the object for the lens of the camera and Engel is a clear teaching of the use of indicia for hitching mechanisms. As combined, it would be obvious to locate the indicia as taught by Engel. Whether Engel has a camera above or level, is not required as the secondary reference.

Applicant's arguments regarding Mills are noted; however, this reference is a teaching of the use of wireless technology instead of teaching of camera location. Therefore applicant's arguments regarding Mills are not persuasive.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Beach whose telephone number is 571.272.6988. The examiner can normally be reached on Monday-Friday, 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas Will can be reached on 571.272.6998. The fax phone number for the organization where this application or proceeding is assigned is 571.273.8300.

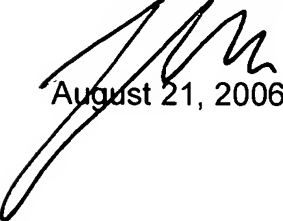
Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Application/Control Number: 10/777,824

Page 6

Art Unit: 3671

Thomas A. Beach



August 21, 2006

THOMAS A. BEACH
Primary Examiner
Group 3600